

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A radiation-emitting semiconductor component with a layer structure comprising
  - an n-doped confinement layer,
  - a p-doped confinement layer, and
  - an active, photon-emitting layer disposed between said n-doped confinement layer and said p-doped confinement layer, wherein
    - said n-doped confinement layer is doped with comprises a first n-dopant for producing high active doping and/or with a sharp doping profile and
    - said active layer is doped with comprises a second n-dopant, different from the first dopant, for improving the layer quality of said active layer.
2. (Canceled)
3. (Canceled)
4. (Currently Amended) The radiation-emitting semiconductor component as recited in claim 1, wherein said n-doped confinement layer is doped both with said first n-dopant and with an additional dopant, particularly with said second n-dopant.
5. (Original) The radiation-emitting semiconductor component as recited in claim 1, wherein said semiconductor component is an LED.

6. (Currently Amended) The radiation-emitting semiconductor component as recited in claim 5, wherein said active layer of said LED is formed by comprises a homogeneous layer.

7. (Currently Amended) The radiation-emitting semiconductor component as recited in claim 5, wherein said active layer of said LED is formed by comprises a quantum well or a multiple quantum well.

8. (Original) The radiation-emitting semiconductor component as recited in claim 1, wherein said semiconductor component is a laser diode in which a first waveguide layer is disposed between said active layer and said n-doped confinement layer and a second waveguide layer is disposed between said active layer and said p-doped confinement layer.

9. (Original) The radiation-emitting semiconductor component as recited in claim 8, wherein said first waveguide layer is undoped.

10. (Original) The radiation-emitting semiconductor component as recited in claim 8, wherein said first waveguide layer is doped with said second n-dopant.

11. (Original) The radiation-emitting semiconductor component as recited in claim 8, wherein said second waveguide layer is undoped.

12. (Currently Amended) The radiation-emitting semiconductor component as recited in claim 1, wherein ~~silicon is used as~~ said first n-dopant comprises silicon.

13. (Currently Amended) The radiation-emitting semiconductor component as recited in claim 1, wherein ~~telluride is used as~~ said second n-dopant comprises telluride.

14. (Currently Amended) The radiation-emitting semiconductor component as recited in claim 1, wherein said p-doped confinement layer is ~~doped with~~ comprises magnesium, carbon or zinc dopant.

15. (Currently Amended) The radiation-emitting semiconductor component as recited in claim 1, wherein said layer structure is formed on the comprises a basis of AlInGaP, AlGaAs, InGaAlAs or InGaAsP.

16. (Canceled)

17. (New) The radiation-emitting semiconductor component as recited claim 4, wherein the additional dopant is said second n-dopant.

18. (New) The radiation-emitting semiconductor component as recited by claim 1, wherein said n-doped confinement layer comprises said first n-dopant with the highest possible active doping.